# Pesticide Safety Worker Health and Safety Branch Series A

## A-7 LAUNDERING PESTICIDE CONTAMINATED CLOTHING FOLLOWING EXPOSURE TO AGRICULTURAL PESTICIDES

#### **General Information:**

This leaflet provides information about removing pesticide residues with non-commercial laundry machines (washing machines at home). If pesticide-contaminated clothing contacts other clothing in the wash, your family's clothing may become contaminated. In addition, persons handling that clothing may get pesticides on their skin, if not properly protected. Minimize exposure to pesticide residues by following the guidelines in this leaflet.

California pesticide worker safety regulations require employers to provide clean coveralls for each employee who handles pesticides (mixes, loads, applies, flags for an application and repairs or cleans pesticide-contaminated equipment) with the signal word "Warning" or "Danger" on the label. Coveralls are a one- or two-piece garment that covers the body except for the head, hands and feet. Your employer must ensure that you wear clean coveralls at the start of each workday and change out of their clothing and wash at the end of the workday when you handle pesticides with the signal word "Danger" or "Warning". You should not take potentially contaminated coveralls home. If your workday does not involve a return to your employer's headquarters, you must:

- remove your contaminated coveralls at work
- store them in a sealable container outside of the living quarters
- return them to your employer.

Always store contaminated personal protective equipment (PPE) separately from clean coveralls. It is your <u>employer's</u> responsibility to wash the coveralls, and to inform the laundry person that the clothing may be contaminated with pesticides and should be washed separately.

Normal work clothing can also become contaminated with pesticides (even under coveralls or other PPE). Field workers work clothing may become contaminated while working in treated fields. When washing any pesticide-contaminated clothing with home laundry equipment, prevent exposure of family members to unwashed clothing or the rinse water. Wash pesticide-contaminated clothing as soon as possible.

If a highly toxic pesticide concentrate is spilled on your clothing, take them off immediately. Do not launder; dispose of the clothes according to state and local laws. Throw away leather items contaminated with pesticides; they cannot be adequately cleaned.

#### **Laundering Contaminated Clothing:**

Consider the following measures when washing pesticide-contaminated clothing at home regardless of the signal word (Danger, Warning or Caution) on the pesticide label.

#### Precautions and Personal Protection.

- Wear rubber gloves when handling contaminated clothing.
- Keep all contaminated clothing, including undergarments, in closed plastic bags outside the house and out of the reach of children and pets, until ready to wash.
- DO NOT put contaminated clothing in the family laundry basket.
- Multiple washings of contaminated clothing may be necessary if contaminated with very toxic pesticides.
- Wash your hands immediately after handling pesticide-contaminated clothing.

#### Loading the Washer.

- Wash contaminated clothing separately from the rest of the family laundry.
- Where feasible, use a separate washer.
- If possible, dump the contaminated clothing directly into the washer from the plastic bag without hand contact.
- Keep the washing area well ventilated.

#### Load Size.

- Place only a few pieces of clothing into the washer at one time.
- It will help ensure good agitation.

#### Pre-wash.

- In an automatic washer, use a pre-soak cycle to dilute the pesticide and increase removal.
- Then run through the full wash cycle.
- If your washer doesn't have a pre-soak cycle, run through the wash cycle twice.

#### Water Level.

 Set the washer to the large or extra large load setting to flush clothing thoroughly and dilute any pesticide present.

#### Water Temperature.

- Use the HOT water setting.
- Hot water increases pesticide removal.

#### Wash Cycle.

- Use the LONGEST wash cycle.
- A double rinse is recommended.

#### <u>Detergent.</u>

- Use a HEAVY-DUTY liquid or powdered detergent as recommended on the package.
- If there is a stain, use a prewash stain and soil remover. (Remember to



wear rubber gloves when handling the clothing.)

#### Water Hardness.

- Hard water can deactivate detergent, and thus can affect pesticide removal.
- Use of water softeners is recommended in areas with hard water.

#### Additives.

- Neither bleach nor ammonia seems to affect removal of most pesticides.
- Never use both; this combination forms a very toxic gas.



#### Cleaning the Washing Machine.

 After laundering pesticide-contaminated clothing, clean the washing machine by running it empty through a complete cycle, using hot water and detergent.

#### Drying.

- Line drying is the preferred method.
- It will not only prevent contamination of the dryer, but sunlight may also help degrade any remaining pesticide residues.
- When using a dryer, run it until the clothing is completely dry. After drying, run the empty dryer for about 10 minutes.

### <u>Tips for Reducing Pesticide Exposure of Family</u> Members:

- Remove contaminated clothing at the work site and put in plastic bags.
- Empty pockets and cuffs at the work site.
- Shower and wash you hair at the end of the workday. Use clean water and soap.
- Inform the person doing the laundry at home that the clothing is pesticide-contaminated and how to launder it.

<u>REMEMBER</u>: It is your employer's responsibility to wash contaminated coveralls and other PPE that he provides for you to use on the job.